UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,245	09/03/2003	Kang Soo Seo	46500-000599/US	2814
30593 7590 11/09/2010 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910			EXAMINER	
			HASAN, SYED Y	
RESTON, VA 20195			ART UNIT	PAPER NUMBER
			2484	
			MAIL DATE	DELIVERY MODE
			11/09/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/653,245	SEO ET AL.			
Office Action Summary	Examiner	Art Unit			
	SYED Y. HASAN	2484			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	lely filed the mailing date of this communication.  (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>09 A</u> This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final.				
Disposition of Claims					
4) Claim(s) 1-7 and 12-39 is/are pending in the a 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 and 12-39 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o Application Papers  9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	wn from consideration.  r election requirement.  r.  epted or b) objected to by the Edrawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 3/23/2010.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite			

Art Unit: 2484

### **DETAILED ACTION**

Page 2

## **Response to Arguments**

1. Applicant's arguments with respect to claims 1-7 and 12-39 filed on 02/29/2010 and 04/09/2010 have been considered but are moot in view of the new ground(s) of rejection.

In re page 15, applicant argues with respect to claims 3, 4, 17, 18, 23, 24, 29, 30, 35 and 36 that "With regard to claims 3, 4, 17, 18, 23, 24, 29, 30, 35, and 36, the Examiner alleges that the navigation pack of Maruyama, in FIG. 12, discloses a navigation pack 86 including a pack header 110 that corresponds to the recited "a first indicator indicating a playitem where the first mark is placed, and wherein the second mark includes a second indicator indicating a playitem where the second mark is placed." Applicants respectfully submit that the pack header 110 contains a pack start code, a system clock reference, and a multiplexing rate. See Maruyama, Col. 14, 11. 38-41. None of this information identifies the navigation pack 86 or indicates that the pack header 110 is in any particular navigation pack 86. Indeed, in the single brief paragraph where Maruyama describes information in the pack header, Maruyama suggests that each piece of information is used in MPEG2 decoding. See Maruyama, Col. 14, 11. 38-39. As such, a "pack start code" is most likely an instruction to begin decoding, and, at any rate, does not necessarily meet or suggest identification information having the recited functionality."

In response examiner presents the disclosure of Kori et al (US 7477833). Kori et al discloses that "FIGS. 6A and 6B show the assembling and editing (IN-OUT editing).It is an operation of creating PlayItem of the playback domain" (col 13, lines 33 – 35, illustrate a playitem.) Also "A 32-bit filed of mark\_time\_stamp stores a time stamp indicating the point specified by the mark. The semantics of the mark\_time\_stamp differ

Art Unit: 2484

with CPI\_type defined in the PlayList(), as shown in FIG. 44. The PlayItem\_id is an 8-bit field specifying the PlayItem where the mark is put. The values of PlayItem\_id corresponding to a preset PlayItem is defined in the PlayList() (see FIG. 25)." (col25, lines 6 – 13, illustrates where mark is put on playitem). Furthermore "Mark\_type denotes the mark type and has the meaning shown in FIG. 136. Mark\_mame\_length denotes the byte length of the mark name indicated in the mark\_name field. The value of this field is not larger than 32. Ref\_to\_PlayItem\_id denotes the value of PlayItem\_id specified by the PlayItem where the mark is put. The value defined in PlayList() corresponding to a given PlayItem is defined in the PlayList()." (col 52, lines 4 – 11 illustrates mark is put on playitem)

Art Unit: 2484

In re page 15, applicant argues with respect to claims 6, 20, 26, 32, and 38 that "With regard to claims 6, 20, 26, 32, and 38, the Examiner alleges that Maruyama discloses mark information "indicating a **number of marks"** in FIG. 27 by pack sector numbers in the VOBU. Applicants respectfully submit that the pack sectors in FIG. 27 are merely physical addresses and that each VOBU may have a variable number of associated sectors, depending on the VOBU size, such as sectors 1431-1432 associated with single VOBU 1411. See Maruyama, FIG. 27; Col. 35, 11. 21-25 (two sectors per VOBU). Because there is one navigation pack per VOBU, the sectors will not correspond to a number of navigation packs. Thus, the sector numbers, which are never stated to be stored numbers in the sectors but instead are more likely identifiers for figure description purposes, cannot indicate a number of navigation packs. Thus,

Page 4

In response examiner presents the disclosure of Kori et al (US 7477833). Kori et al discloses the argument above and figs 2, 3, 9, 12, 29, 30, 31, 39, 64 and 124 illustrate number of marks.

Similar arguments were presented by the applicant in the appeal brief filed on 04/09/2010. The argument above responds to all those limitations.

Hence claims 1-7 and 12-39 remain rejected.

Maruyama further lacks the recited number information."

Art Unit: 2484

# Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "(Official Gazette notice of 22 November 2005), Annex IV reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

- ... a signal does not fall within one of the four statutory classes of Sec. 101
- ... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.
- 3. Claim 1 7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claim 1 - 7 define "A computer readable medium having a data structure ......"

In the state of the art, transitory signals are commonplace as a medium for transmitting computer instructions and thus in the absence of any evidence to the contrary and given the broadest reasonable interpretation, the scope of a

"computer readable medium" covers a signal per se. A transitory signal does not fall within the definition of a process, machine, manufacture or composition of matter.

Examiner recommends either cancelling the claim or adding language to the claim that makes this claim statutory, e.g. "non-transitory computer readable medium"

This claim language needs to be supported by the specification.

4. Claims 12, 14, 16 – 21 and 28 - 33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 12, 14, 16 – 21 and 28 - 33 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing ("[t]he Supreme Court has recognized only two instances in which such a method may qualify as a section 101 process: when the process 'either [1] was tied to a particular apparatus or [2] operated to change materials to a 'different state or thing."" See PTO Supp. Br. 4 (quoting *Flook*, 437 U.S. at 588 n.9). In *Diehr*, the Supreme Court confirmed that a process claim reciting an algorithm could state statutory subject matter if it: (1) is tied to a machine or (2) creates or involves a composition of matter or manufacture. 12 450 U.S. at 184." *In re Comiskey*, 84 USPQ2d 1670 (Fed. Cir. 2007). The instant claims neither transform underlying subject matter nor positively tie to

Art Unit: 2484

another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. In order for a process to be "tied" to another statutory category, the structure of another statutory category should be positively recited in a step or steps significant to the basic inventive concept, and NOT just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 2, 5, 7, 12 16, 19, 21, 22, 25, 27, 28, 31, 33, 34, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (US 6,385,289 B1) in view of Mori et al. (US 2002/0110369 A1).

**Regarding Claim 1,** Maruyama et al. teaches a computer-readable medium having a data structure for managing reproduction of still images (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU, comprising:

 a data area storing a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 – data area having VOBU containing video packs (Fig. 11)

Art Unit: 2484

- first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33); and

Page 8

- a playlist area storing at least one playlist (Fig. 3 having a program chain in audio & video data area), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain) and at least one playitem and at least one sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on the second still image to provide for at least skipping (Fig. 8 – program chains skipping between various cells, having still images) from reproducing the first still image to reproducing the second still image (Fig. 11 - C IDN#1 having a navigation pack containing presentation control information), the playitem indicating an in-point and an outpoint of the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 - user defined program chain), the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data; and
- a management area storing at least a first clip information file and a second clip information file (see Fig. 8, DA storage of control information, having VTS's and video and picture objects; Fig. 11 VTS having VOBS therein VOBUs 1 and 2, 85), the first clip information file including mapping information between a

presentation time and a unit of the first clip stream file (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the second clip information file including mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the first and second clip information files corresponding to the first and second clip stream files, respectively (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Regarding Claim 2, Maruyama et al. teaches the computer-readable medium of claim 1, wherein the mark information includes a first mark associated with the first still image and a second mark associated with the second still image, the first and second marks providing the presentation information on the first and second still images, respectively (Figs. 11, 27 – C\_IDN#1 having a video object unit and C\_IDN#2 having a video object unit each containing a navigation pack with presentation control – Figs. 12, 13).

Regarding Claim 5, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a type indicator indicating a type of the first mark, and the second mark includes a type indicator indicating a type of the second mark (Col. 14, lines 38+ - containing a stream ID for both pack and system headers).

Regarding Claim 7, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark points to the first still image and the second mark points to the second still image (Fig. 12 – wherein a first pack and system header associates with the subsequent video packs, each have a still picture for the first mark and second pack and system header associates with the subsequent video packs, 88, also having a still picture for the second mark).

Regarding Claim 12, Maruyama et al. teaches a method of reproducing a data structure for managing reproduction of still images recorded on the computer-readable medium (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU, comprising:

- reproducing a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 data area having VOBU containing video packs (Fig. 11) first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33);
- reproducing at least one playlist file, the playlist including mark information (Fig. 8) - having a cell ID number within a program chain) and at least one playitem and at least one sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on first and second still images to provide for at least skipping (Fig. 8 - program chains skipping between various cells, having still images) from reproducing the first still image to reproducing the second still image (Fig. 11 - C IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the playitem indicating an in-point and an outpoint of the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 - user defined program chain), the playitem managing the first and the second still images and

Art Unit: 2484

the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data; and

Page 12

- reproducing at least a first clip information file and a second clip information file, the first clip information file including mapping information between a presentation time and a unit of the first clip stream file, and the second clip information file including mapping information between a presentation time and a unit of the second clip stream file, the first and second clip information files corresponding to the first and second clip stream files, respectively.
- a management area storing at least a first and second clip information file (see Fig. 8, DA storage of control information, having VTS's and video and picture objects; Fig. 11 VTS having VOBS therein VOBUs 1 and 2, 85), the first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), respectively, the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file for the first still image, the second information file including a mapping information between a presentation time and a unit of the second clip stream file for the second still image (Col. 12, lines 26-33 each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 each respective video pack having also a recorded presentation time stamp; Fig. 12).

Art Unit: 2484

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

**Regarding Claim 13,** Maruyama et al. teaches an apparatus for reproducing a data structure for managing reproduction of still images recorded on a computer-readable medium, comprising:

- a pick up configured to reproduce data recorded on the computer-readable medium (Fig. 19, 32); and
- a controller configured to control the pick up to reproduce a first clip stream file and a second clip file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 data area having VOBU containing video packs (Fig. 11) first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33); and

Page 14

Art Unit: 2484

the controller configured to control the pick up (Fig. 19, 36) to reproduce at least one playlist file (in at least Col. 2, Lines 30-35 - playback of program chains -Fig. 34; see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the playlist including mark information (Fig. 8 - having a cell ID number within a program chain) and at least one playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark information providing presentation information on first and second still images (Fig. 11 - C IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 - each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 - program chains skipping between various cells, having still images), the playitem indicating an in-point and an out-point the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data, (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data, and

• the controller configured to control the pick up to reproduce a first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file, the second information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Art Unit: 2484

Regarding Claim 14, Maruyama et al. teaches a method of recording a data structure for managing reproduction of still images on a computer-readable medium, comprising:

- recording a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 data area having VOBU containing video packs (Fig. 11) first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33);
- recording (Col. 26, lines 21+; Fig. 25 recording of video and audio data in data area) at least one playlist file, the playlist including mark information (Fig. 8 having a cell ID number within a program chain) and at least one playitem and at least one sub-playitem, (Fig. 27, Col. 35, lines 45-61 user defined program chain), the mark information providing presentation information on the second still image (Fig. 11 C\_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 program chains skipping between various cells, having still images), the playitem indicating an in-point and an out-

point of the first clip stream file for reproducing the first and second still images, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain);

- the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data, and
- recording at least a first clip information file and a second information file (Col. 26, lines 21+; Fig. 25 recording of video and audio data in data area), the first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file, the second information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 each respective video pack having also a recorded presentation time stamp; Fig. 12).

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent

reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Regarding Claim 15, Maruyama et al. teaches an apparatus for recording a data structure for managing reproduction still images on a computer-readable medium (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU), comprising:

- a pick up configured to record data on the computer-readable medium (Fig. 19, 32); and
- a controller configured to control the pick up to record a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing the still images including a first still image and a second still image, the second clip stream file including audio data (see Fig. 3 data area having VOBU containing video packs (Fig. 11) first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33); and

Art Unit: 2484

the controller configured to control the pick up to record (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area) at least one playlist file (in at least Col. 2, Lines 30-35 - playback of program chains - Fig. 34; see Fig. 8, DA - storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85) and playitem and at least one sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain), the mark information providing presentation information on second still image (Fig. 11 - C IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 - each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 - program chains skipping between various cells, having still images), the playitem indicating an in-point and an outpoint of the first clip stream file, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playitem managing the first and the second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data, and

the controller configured to control the pick up to record a first clip information file (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33) including a mapping information between a presentation time and a unit of the first clip stream file and the second clip information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the first and the second clip information file corresponding to the first and the second clip stream files (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), respectively.

Maruyama fails to explicitly teach the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data. Mori et al. teaches the playitem managing the first and second still images and the sub-playitem managing the audio data so as to permit independent reproduction of the first and the second still images and the audio data (Figs. 12A,B, 36A,B; Paragraphs [0188,0233]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have separate audio and picture allowing user the ability to choose among various options including solely video, audio or both.

Claims 16, 22, 28 and 34 are rejected under the same grounds as claim 2.

Claims 19, 25, 31 and 37 are rejected under the same grounds as claim 5.

Claims 21, 27, 33 and 39 are rejected under the same grounds as claim 7.

7. Claims 3, 4, 6, 17, 18, 20, 23, 24, 26, 29, 30, 32, 35, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (US 6,385,289 B1) in view of Mori et al. (US 2002/0110369 A1) and further in view of Kori et al (US 7477833)

**Regarding Claim 3,** Maruyama et al. and Mori et al teach the computer-readable medium (see claim 2 above)

Maruyama fails to explicitly teach wherein the first mark includes a first indicator indicating a playitem where the first mark is placed and wherein the second mark includes a second indicator indicating a playitem where the second mark is placed. Kori et al teaches wherein the first mark includes a first indicator indicating a playitem where the first mark is placed and wherein the second mark includes a second indicator indicating a playitem where the second mark is placed (col 13, lines 33 - 35, col 25, lines 6 - 13 and col 52, lines 4 - 11, see argument above).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide access to a desired location of an AV stream promptly and reliably.

Regarding Claim 4, Maruyama et al. and Mori et al teach the computer-readable medium (see claim 2 above)

Maruyama fails to explicitly teach wherein the first mark includes a first indicator indicating a point in a playitem where the first mark is placed and wherein the second mark includes a second indicator indicating a point in a playitem where the second mark is placed. Kori et al teaches wherein the first mark includes a first indicator indicating a point in a playitem where the first mark is placed and wherein the second mark includes a second indicator indicating a point in a playitem where the second mark is placed (col 13, lines 33 - 35, col 25, lines 6 - 13 and col 52, lines 4 - 11, see argument above).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide access to a desired location of an AV stream promptly and reliably.

Regarding Claim 6, Maruyama et al. and Mori et al teach the computer-readable medium (see claim 2 above)

Maruyama fails to explicitly teach wherein the mark information indicates a number of marks in the mark information. Kori et al teaches wherein the mark information indicates a number of marks in the mark information (col 13, lines 33 - 35, col 25, lines 6 - 13 and col 52, lines 4 - 11 and figs 2, 3, 9, 12, 29, 30, 31, 39, 64 and 124, see argument above)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide access to a desired location of an AV stream promptly and reliably.

Art Unit: 2484

Claims 17, 23, 29 and 35 are rejected under the same grounds as claim 3.

Claims 18, 24, 30 and 36 are rejected under the same grounds as claim 4.

Claims 20, 26, 32 and 38 are rejected under the same grounds as claim 6.

### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-1082. The examiner can normally be reached on 9/8/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2484

/S. Y. H./ 11/02/2010

/Thai Tran/ Supervisory Patent Examiner, Art Unit 2484